

IN THE CLAIMS:

Please amend claims 15, 19, 23, 27, 30, 33 and 36 to read as follows:

15. Digital signal conversion apparatus for converting a first digital image signal to a second digital image signal having a high resolution component, comprising:
a memory for storing class data for respective classes at addresses corresponding to said respective classes,
said class data being associated with at least a training digital image signal having said high resolution component;
means for receiving said first digital image signal including pixel data representing pixel values;
means for clustering a plurality of pixel data of said first digital image signal adjacent to a pixel data of said second digital image signal to produce a class;
means for retrieving said class data from one of said addresses of said memory corresponding to said class of said first digital image signal; and
means for generating all of pixel data representing pixel values of said second digital image signal based upon at least said retrieved class data.

19. A digital signal data conversion method for converting a first digital image signal to a second digital image signal having a high resolution component, comprising the steps of:

sub c2
storing class data for respective classes at addresses in a memory corresponding to said respective classes, said class data being associated with at least a training digital image signal having said high resolution component:

B2
receiving said first digital image signal including pixel data representing pixel values;

(c)
clustering a plurality of pixel data of said first digital image signal adjacent to a pixel data of said second digital image signal to produce a class;

retrieving said class data from one of said addresses of said memory corresponding to said class of said first digital video signal; and

generating all of pixel data representing pixel values of said second digital image signal based upon at least said retrieved class data.

sub c3
23. Digital signal conversion apparatus for converting a digital video signal admitting of a first standard into a digital video signal admitting of a second standard, a first resolution of said digital video signal admitting of said first standard being lower than a second resolution of said digital video signal admitting of said second standard, comprising:

a memory for storing class data for respective classes at addresses corresponding to said respective classes, said class data being associated with at least a

Sub C3

training digital video signal admitting of said second standard having said second resolution;
means for receiving an input digital video signal including pixel data and admitting of said first standard;
means for clustering a plurality of pixel data of said input digital video signal adjacent to a pixel data of a second digital video signal to produce a class;
means for retrieving said class data from one of said addresses of said memory corresponding to said class of said input digital video signal admitting of said first standard; and
means for generating all of pixel data representing pixel values of said digital video signal admitting of said second standard based upon at least said class data which has been retrieved.

Sub C4

27. Digital signal conversion apparatus for converting a standard definition digital video signal to a high definition digital video signal, comprising:

a memory for storing class data for respective classes at addresses corresponding to said respective classes, said class data being associated with at least a training high definition video signal;

means for receiving a standard definition digital video signal having pixel data representing pixel values;

means for clustering a plurality of pixel data of said standard definition digital video signal adjacent to a pixel

Sub
C4

data of a second digital video signal to produce a class;

B4
means for retrieving said class data from one of said addresses of said memory corresponding to said class of said standard definition digital video signal; and

means for generating all of pixel data representing pixel values of a high definition digital video signal based upon at least said retrieved class data.

30. A digital signal conversion method, comprising the steps of:

storing class data for respective classes at addresses in a memory corresponding to said respective classes, said class data being associated with at least a training high definition digital video signal;

receiving a standard definition digital video signal having pixel data representing pixel values;

B5
clustering a plurality of pixel data of said standard definition digital video signal adjacent to a pixel data of a second digital video signal to produce a class;

retrieving said stored class data from one of said addresses corresponding to said class of said standard definition digital video signal; and

generating all of pixel data representing pixel values of a second output digital video signal based upon at least said retrieved class data.

33. Digital data conversion apparatus for converting a first digital image signal to a second digital image signal having a high resolution component, comprising:

a memory for storing class data for respective classes at addresses corresponding to said respective classes, said class data being associated with at least a training digital image data having said high resolution component;

means for receiving said first digital image signal including pixel data representing pixel values;

means for clustering a plurality of pixel data of said first digital image signal adjacent to a plurality of pixel data of said second digital image signal to produce a class, said class being used to retrieve a class data to generate a plurality of pixel data representing pixel values of a second digital image signal;

means for retrieving said class data from addresses of said memory corresponding to said class of said first digital image signal; and

means for generating a plurality of pixel data representing pixel values of said second digital image signal based upon said retrieved class data.

36. Digital data conversion method for converting a first digital image signal to a second digital image signal having a high resolution component, comprising the steps of:

storing class data for respective classes at addresses in a memory corresponding to said respective classes, said class

Sub C7
data being associated with at least a training digital image data having said high resolution component;

receiving said first digital image signal including pixel data representing pixel values;

B4
clustering a plurality of pixel data of said first digital image signal adjacent to a plurality of pixel data of said second digital image signal to produce a class, said class using to retrieve a class data to generate a plurality of pixel data representing pixel values of a second digital image signal;

retrieving said class data from addresses of said memory corresponding to said class of said first digital image signal; and

generating a plurality of pixel data representing pixel values of said second digital image signal based upon said retrieved class data.

REMARKS

In light of the amendments to the application noted above and remarks to follow, reconsideration and allowance of the above-referenced application are respectfully requested.

By Advisory Action of February 9, 2000, the Examiner has indicated that the Amendment filed October 28, 1999 was in improper form for making amendments to a reissue. Applicant submits this substitute amendment curing the defects noted by the Examiner. Specifically, the entire text of each claim being